A Comparison of 30-Day Means, 7-Day Means, and Violations of the Instantaneous Minimum in Near-Shore and Mid-Channel Habitats using Continuous Monitors Located in Two VA Segments

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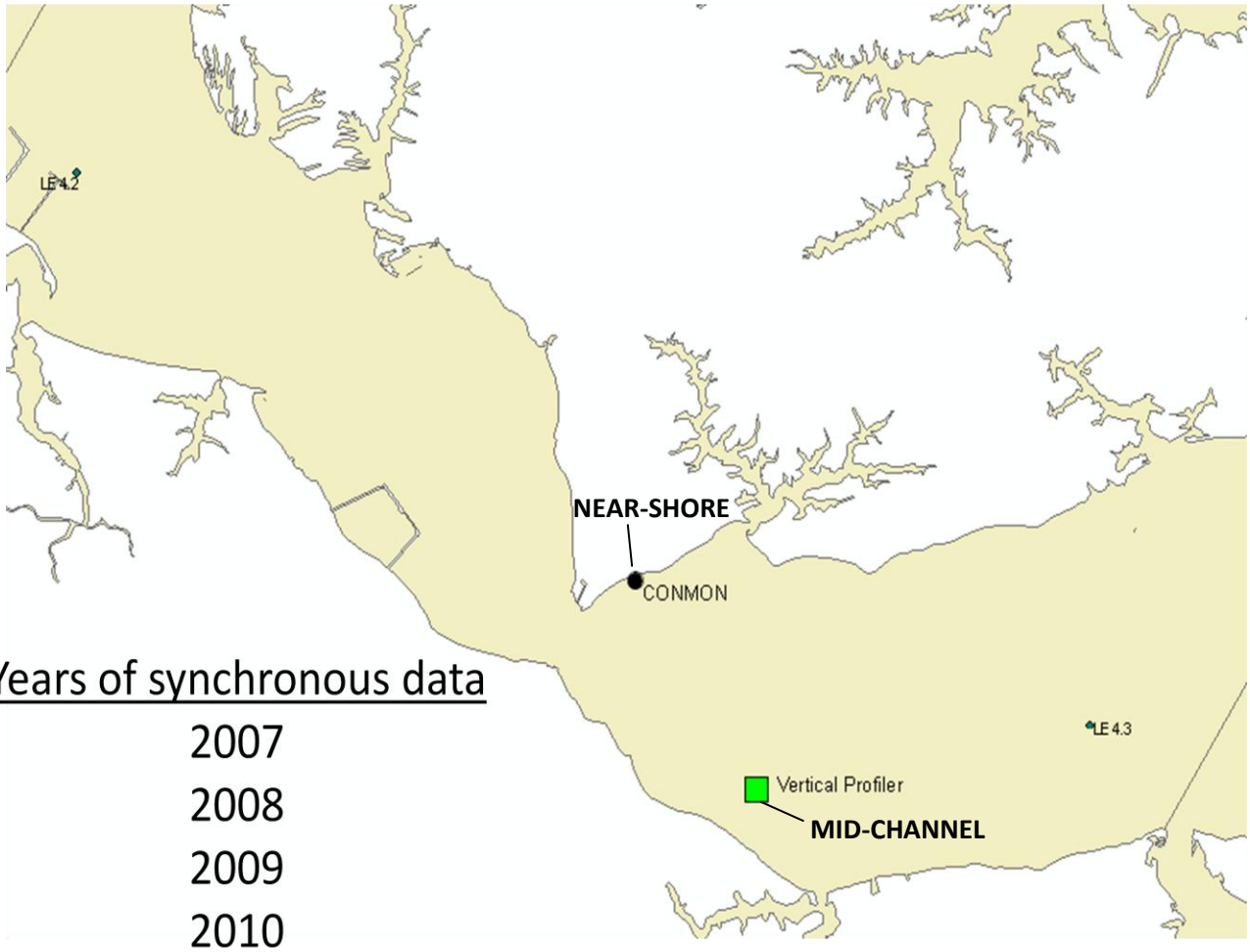
Case #1: York PH



Years of synchronous data

2007

2008

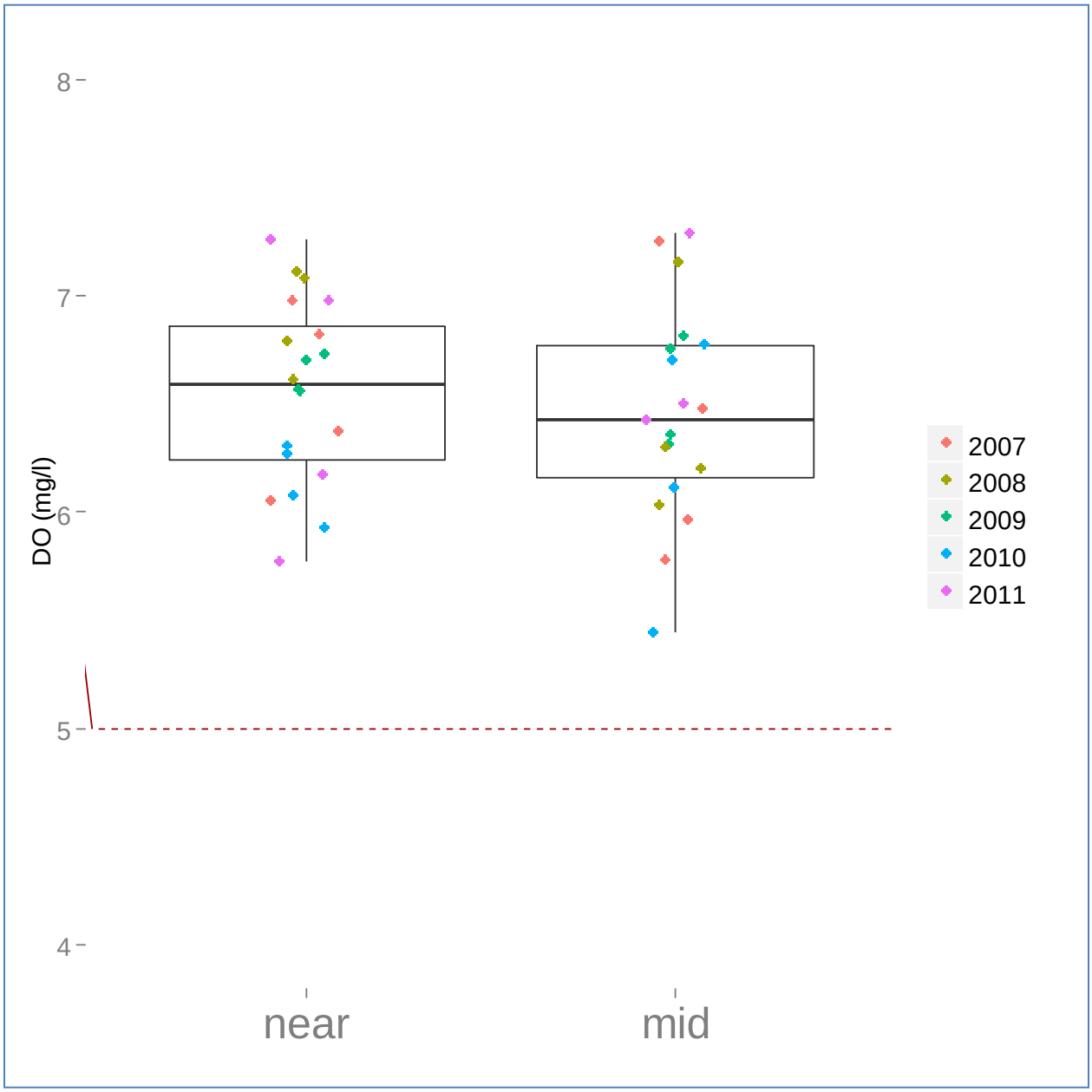
2009

2010

2011

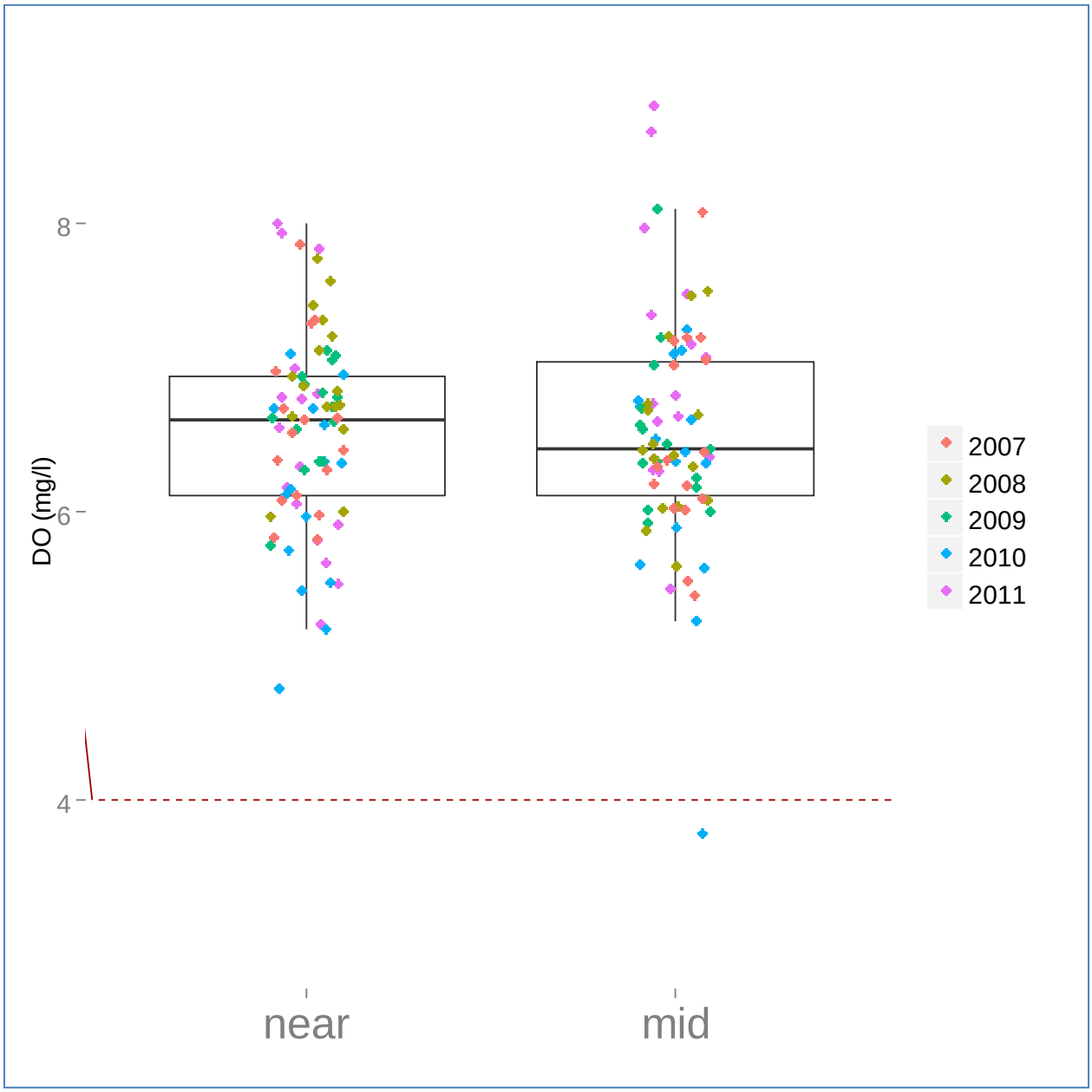
York PH

30-Day Mean



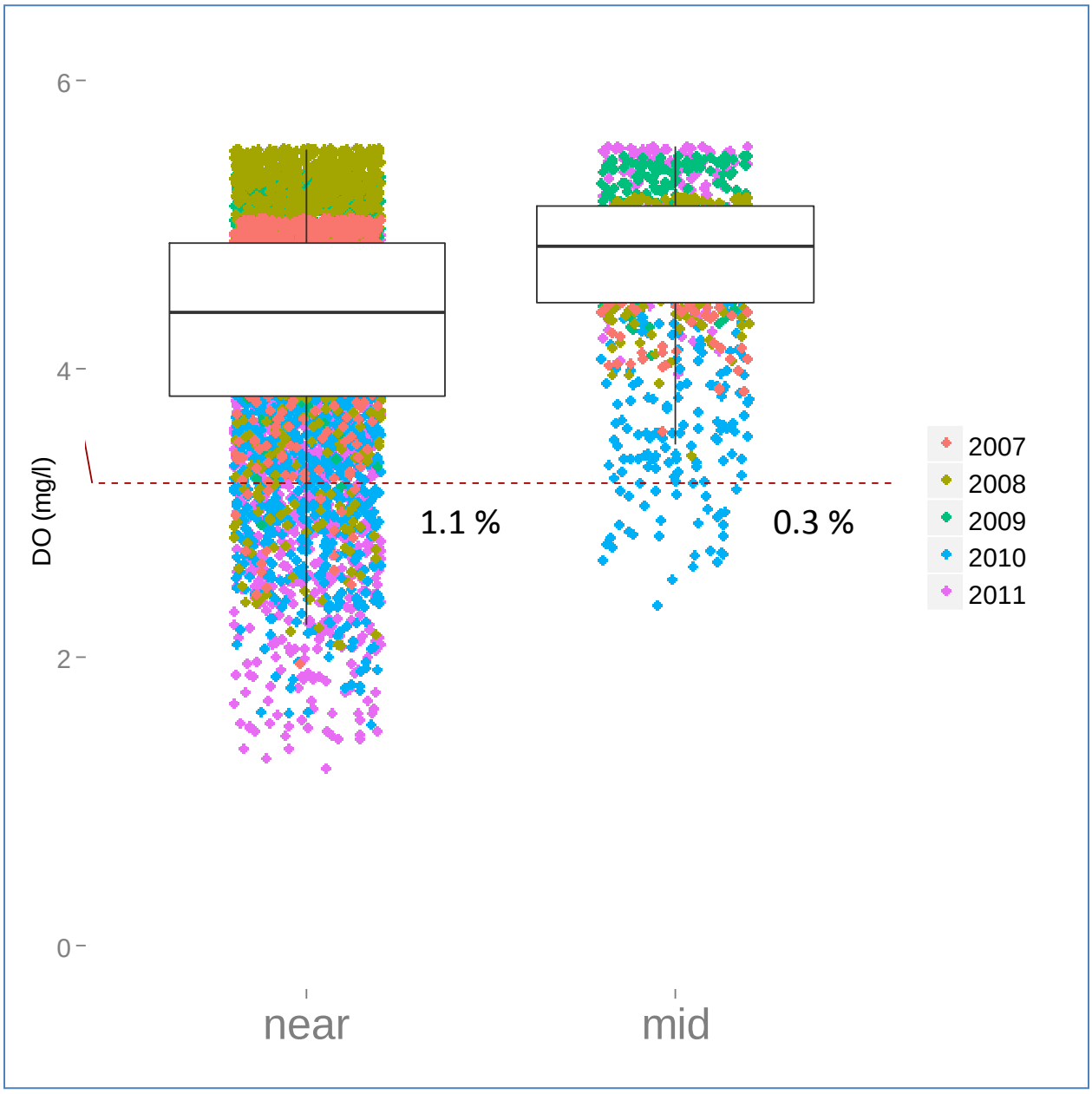
York PH

7 Day Mean

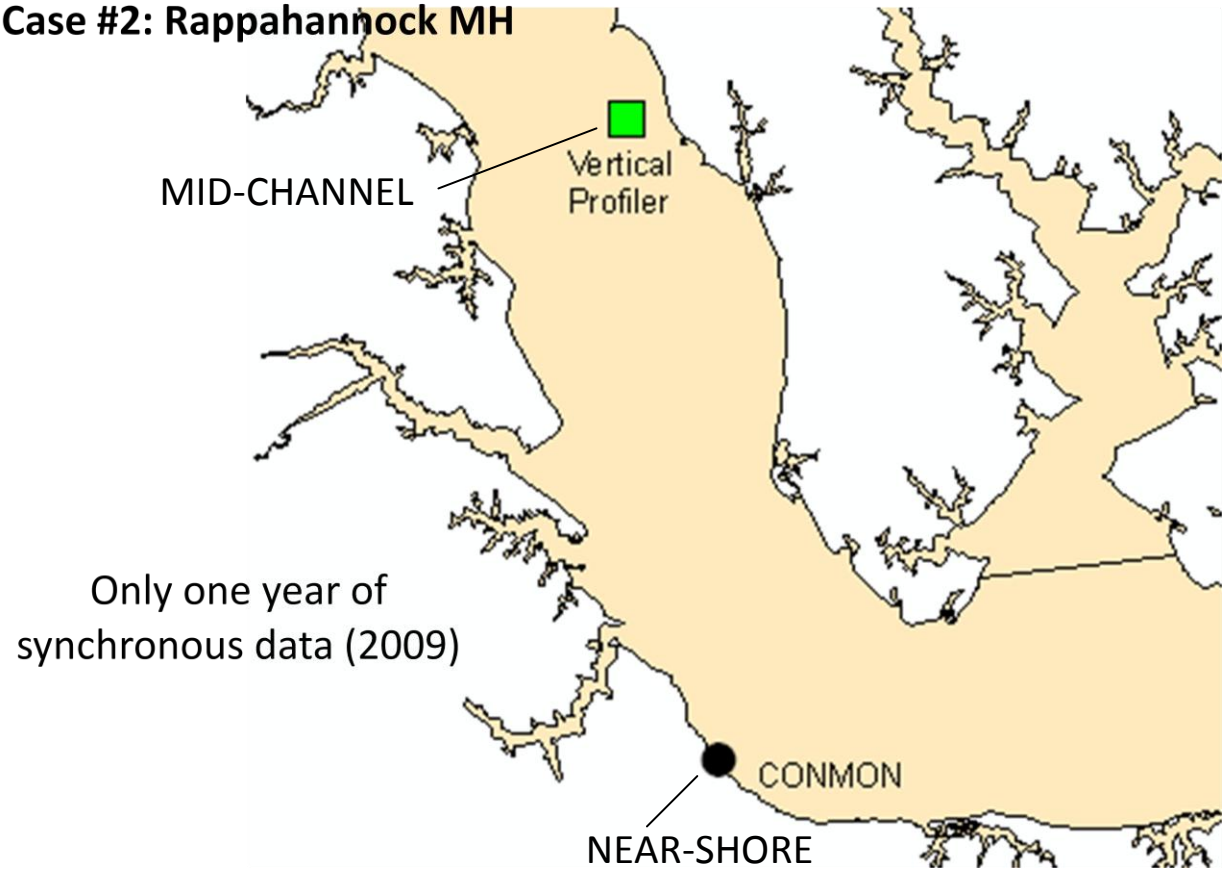


York PH

10^{th} Percentile (percentage is the violation rate out of total dataset)

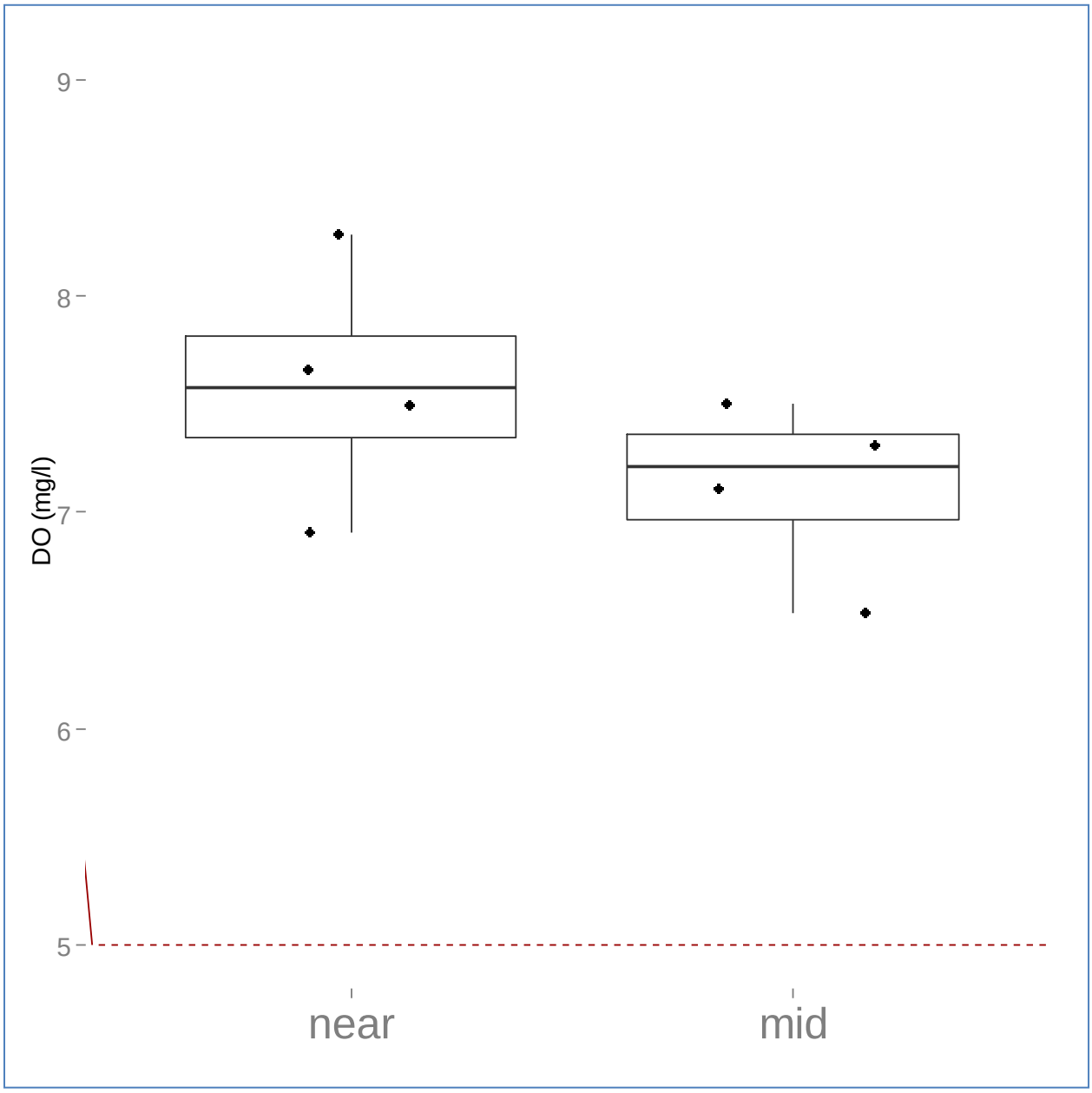


Case #2: Rappahannock MH



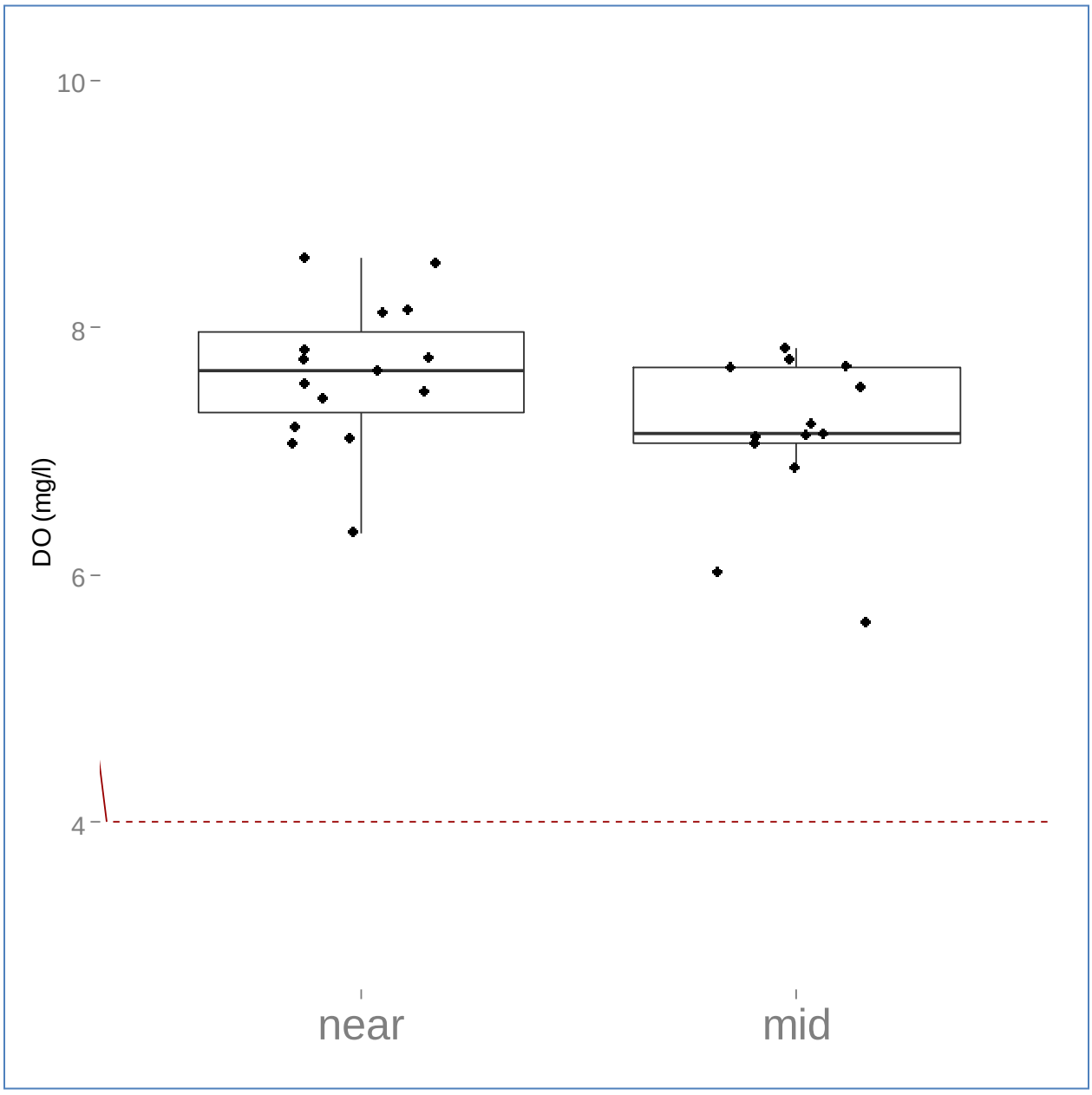
Rappahannock MH

30-Day Mean



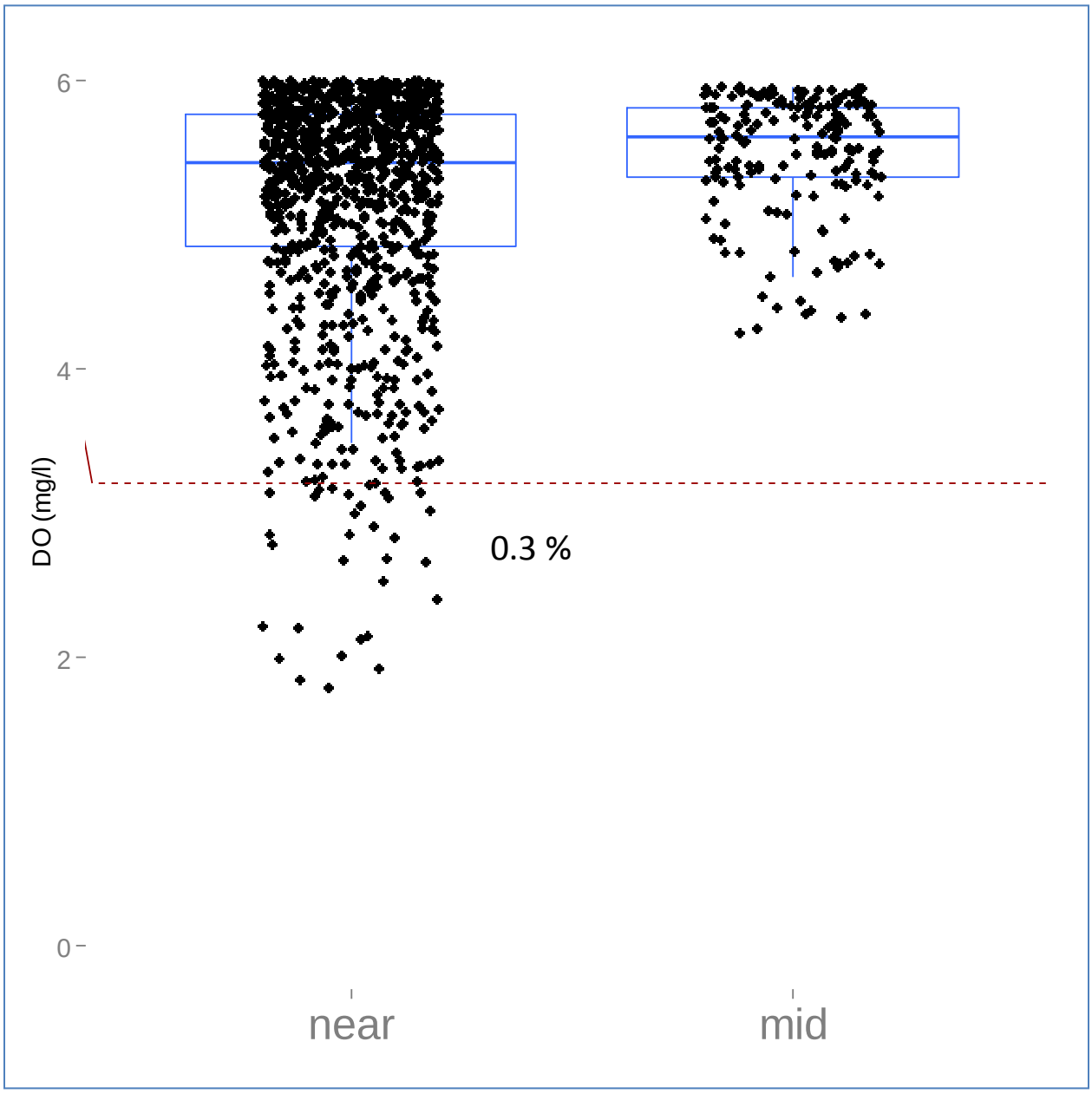
Rappahannock MH

7-Day Mean



Rappahannock MH

10th Percentile (percentage is the violation rate out of total dataset)



Findings:

- No significant near-shore vs. mid-channel differences in 30-Day and 7-Day Means.

- Near-shore monitors are more likely to pick up on violations of the instantaneous minimum criterion than mid-channel monitors.

Rules:

-Surface data (0 – 1 m) were used

-30-Day Means: averages from the first 30 days of each month

-7 Day Means: 4 weeks per month starting at the first of the month and ending on the 28th day.

-Summertime (June-September) only